

**Amendments to the Claims**

The following listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims**

1-23 (cancelled)

24. (currently amended) A method of determining a condition of a ~~test specimen~~cervical tissue, said method comprising:
- determining whether fluorescence spectral data from a ~~test specimen~~cervical tissue is not definitive of said ~~test specimen~~cervical tissue having a known condition;
  - obtaining reflectance spectral data from said ~~test specimen~~cervical tissue;
  - processing said reflectance spectral data of said ~~first test specimen~~cervical tissue using reference reflectance spectral data from a plurality of reference specimens having said known condition; and
  - determining said condition of said ~~first test specimen~~cervical tissue based at least in part on said processing.
25. (cancelled)
26. (currently amended) The method of claim ~~25~~24, wherein ~~said tissue comprises human cervical tissue and~~ said known condition is a known state of health.
27. (previously presented) The method of claim 26, wherein said known state of health comprises one of the conditions of normal squamous tissue, metaplasia, CIN I, and CIN II/III.
28. (previously presented) The method of claim 24, wherein said reference reflectance spectral data comprises an average amplitude for each of a plurality of wavelengths.
29. (previously presented) The method of claim 28, wherein said processing comprises determining a residual amplitude at each of said plurality of wavelengths.

30. (currently amended) The method of claim 29, wherein determining said residual amplitude at each of said plurality of wavelengths comprises subtracting an average amplitude of said reference reflectance spectral data from an amplitude of said reflectance spectral data of said ~~test specimen~~cervical tissue.

31. (currently amended) The method of claim 30, wherein determining said condition of said ~~test specimen~~cervical tissue comprises comparing said residual amplitude at each of said plurality of wavelengths to one or more sets of reference residual reflectance spectral data.

32. (currently amended) The method of claim 24, ~~further comprising~~wherein said determining of said condition comprises;  
obtaining additional optical information from said test specimen; and ~~said determining of said condition comprises;~~  
evaluating said additional optical information with said fluorescence spectral data and said reflectance spectral data from said ~~test specimen~~cervical tissue to determine said condition of said cervical tissue.

33. (previously presented) The method of claim 32, wherein said additional optical information comprises video information.

34. (previously presented) The method of claim 32, wherein said additional optical information comprises an optical image.

35. (cancelled)

36. (currently amended) The method of claim ~~35~~32, wherein ~~said tissue comprises human cervical tissue and~~ said known condition is a known state of health.

37. (previously presented) The method of claim 36, wherein said known state of health comprises one of the conditions of normal squamous tissue, metaplasia, CIN I, and CIN II/III.

38. (currently amended) A system for determining a condition of a test-specimencervical tissue, said system comprising:

a data collection module adapted for obtaining reflectance spectral data from a test specimencervical tissue; and

a computation module adapted for determining whether fluorescence spectral data from said test-specimencervical tissue is definitive of said test-specimencervical tissue having a known condition, in response to determining that said fluorescence spectral data from said test-specimencervical tissue is not definitive, processing said reflectance spectral data of said first test-specimencervical tissue using reference reflectance spectral data from a plurality of reference specimens having said known condition, and determining said condition of said first test-specimencervical tissue based at least in part on said processing.

39. (cancelled)

40. (currently amended) The system of claim 3938, wherein ~~said tissue comprises human cervival tissue and~~ said known condition is a known state of health.

41. (previously presented) The system of claim 40, wherein said known state of health comprises one of the conditions of normal squamous tissue, metaplasia, CIN I, and CIN II/III.

42. (currently amended) The system of claim 38, wherein said data collection module obtains additional optical information from said test-specimencervical tissue, and  
——said analysis-computation module evaluates said additional optical information with said fluorescence spectral data and said reflectance spectral data from said test-specimencervical tissue in said identifying-said state-of health-determining of said condition of said test specimencervical tissue.

43. (previously presented) The system of claim 42, wherein said additional optical information comprises video information.

44. (previously presented) The system of claim 42, wherein said additional optical information comprises an optical image.

45. (cancelled)

46. (currently amended) The system of claim ~~45~~42, wherein ~~said tissue comprises human cervical tissue and~~ said known condition is a known state of health.

47. (previously presented) The system of claim 46, wherein said known state of health comprises one of the conditions of normal squamous tissue, metaplasia, CIN I, and CIN II/III.

48. (currently amended) A method of determining a condition of a ~~test specimen~~cervical tissue, said method comprising:  
determining that a first spectral observation from a ~~test specimen~~cervical tissue is not definitive of said ~~test specimen~~cervical tissue having a known condition;  
obtaining a second spectral observation from said ~~test specimen~~cervical tissue, said second spectral observation using information obtained from a different type of spectral data than said first spectral observation;  
processing data from said second spectral observation of said ~~test specimen~~cervical tissue using reference spectral data from a plurality of reference specimens having said known condition; and  
determining said condition of said ~~test specimen~~cervical tissue based at least in part on said processing.